

CLAIMS

What is claimed is:

1. An isolated KIAA0175 inhibitor wherein said KIAA0175 inhibitor is selected from the group consisting of an anti-sense molecule, a ribozyme, an antibody, an antibody fragment, a protein, a polypeptide and a small molecule.
2. The isolated KIAA0175 inhibitor of claim 1 wherein said KIAA0175 inhibitor is an anti-sense molecule.
3. The isolated KIAA0175 inhibitor of claim 2 wherein said anti-sense molecule or the complement thereof comprises at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.
4. The isolated KIAA0175 inhibitor of claim 3 wherein said anti-sense molecule or the complement thereof hybridizes under high stringency conditions to the sequence of SEQ ID NO:9.
5. The isolated KIAA0175 inhibitor of claim 2 wherein said anti-sense molecule comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and SEQ ID NO:5.
6. A method of decreasing the expression of KIAA0175 in a mammalian cell, comprising administering to said cell a KIAA0175 inhibitor of claim 1.

7. The method according to claim 6 wherein said KIAA0175 inhibitor is an anti-sense molecule comprising at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.

8. A method of decreasing the expression of p21 in a mammalian cell, comprising administering to said cell a KIAA0175 inhibitor of claim 1.

9. The method according to claim 8 wherein said KIAA0175 inhibitor is an anti-sense molecule comprising at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.

10. A method of decreasing the expression of p53 in a mammalian cell, comprising administering to said cell a KIAA0175 inhibitor of claim 1.

11. The method according to claim 10 wherein said KIAA0175 inhibitor is an anti-sense molecule comprising at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.

12. A method for increasing the chemosensitivity and/or radiosensitivity of a mammalian cell, comprising administering to said mammalian cell a therapeutically effective amount of a KIAA0175 inhibitor of claim 1.

13. The method according to claim 12 wherein said KIAA0175 inhibitor is an anti-sense molecule comprising at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.

14. The method of claim 12 wherein said mammalian cell is a tumor cell.

15. The method of claim 12 wherein said increase in chemosensitivity and/or radiosensitivity is determined by a measurement selected from the group consisting of measuring a reduction in γ -irradiation or hydroxyurea induced p53 or p21 protein levels, measuring a reduction in γ -irradiation or hydroxyurea induced cell cycle arrest and measuring an increase in γ -irradiation or hydroxyurea induced cell sensitization.

16. A method of reducing the side effects of cancer therapy, comprising administering to a mammal in need thereof a therapeutically effective amount of a KIAA0175 inhibitor of claim 1.

17. The method according to claim 16 wherein said KIAA0175 inhibitor is an anti-sense molecule comprising at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.

18. A method of treating neoplastic disease in a mammal in need of said treatment, comprising administering to said mammal a KIAA0175 inhibitor of claim 1 such that said neoplastic disease is reduced in severity.

19. A method of decreasing the expression of KIAA0175 in a mammalian cell, comprising administering *ex vivo* to said cell a KIAA0175 inhibitor of claim 1.

20. A composition, comprising a therapeutically effective amount of at least one KIAA0175 inhibitor in a pharmaceutically acceptable carrier.

21. The composition of claim 20, comprising two or more KIAA0175 inhibitors.

22. The composition of claim 20 wherein said at least one KIAA0175 inhibitor is an anti-sense molecule.

23. The composition of claim 22 wherein said anti-sense molecule or the complement thereof comprises at least 17 consecutive nucleic acids of the sequence of SEQ ID NO:9.

24. The composition of claim 23 wherein said anti-sense molecule or the complement thereof hybridizes under high stringency conditions to the sequence of SEQ ID NO:9.

25. The composition of claim 22 wherein said anti-sense molecule comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and SEQ ID NO:5.

26. The composition of claim 20 further comprising an inhibitor selected from the group consisting of an ATM inhibitor, a DNA-PK inhibitor and an ATR inhibitor.